

REMARKS/ARGUMENTS

Claims 12-15, 20-28, 30, and 32-48 are active. Claim 12 has been revised to refer to polynucleotides encoding SEQ ID NO: 2 or a functionally-active fragment of SEQ ID NO: 2. Support for this amendment is found in the specification on pages 7-8. Claim 13, which was indicated as allowable, has been placed in independent form and Claim 14, also indicated as allowable, made dependent on Claim 13. Claim 30 has been directed to polynucleotides which are the full complements of those of Claim 12. Antisense sequences find support on pages 7-9 of the specification. New Claims 42-44, which refer to promoter sequences find support at the top of page 9 and on pages 16-17 (Example 4) of the specification. New Claims 45-48 find support in original Claim 11. Accordingly, the Applicants do not believe that any new matter has been introduced. Favorable consideration and allowance of this application is now respectfully requested.

Rejection—35 U.S.C. 112, first paragraph

Claims 12, 15, 20-28, 40 and 41 were rejected under 35 U.S.C. 112, first paragraph, as not being adequately described by the specification. These rejections are moot in view of the amendments above. The present claims are directed to polynucleotides that encode the polypeptide of SEQ ID NO: 2 or a functionally-active fragment of SEQ ID NO: 2. Support for fragments of SEQ ID NO: 2 is found *inter alia* on page 7, lines 31-35. Since the entire sequence of SEQ ID NO: 2 is described, each fragment of this sequence is also described. The full complements of these sequences are described in the specification on page 8, lines 9-14, and the specific complementary sequences would be immediately evident to one with skill in the art based on the disclosure of SEQ ID NO: 2 and the well-known genetic code. Accordingly, the Applicants respectfully submit that this description rejection would not apply to the present claims.

Rejection—35 U.S.C. 112, first paragraph

Claims 12, 15, 19-28, 30 and 32-41 were rejected under 35 U.S.C. 112, first paragraph, as lacking adequate enablement. This rejection is moot in view of the amendment of the claims, which are now directed to polynucleotide sequences encoding SEQ ID NO: 2 or functional fragments of SEQ ID NO: 2, or the full complements of these sequences. Based on well-known molecular biological methods and on the methods disclosed or exemplified in the specification, one with skill in the art would have been able to identify polynucleotides encoding functional fragments of SEQ ID NO: 2 without undue experimentation.

One with skill in the art would have been enabled to select an appropriate length for the antisense sequence to SEQ ID NO: 1, an appropriate promoter to ensure its expression at a suitable level, and an appropriate spacing of the promoter and antisense sequences based on well-known molecular biological techniques and on those disclosed or exemplified in the specification. Accordingly, this rejection would not apply to the claims as now amended.

Allowable Subject Matter

The Applicants thank Examiner Collins for indicating that the subject matter of Claims 13, 14 and 17 is allowable.

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

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A handwritten signature in black ink, appearing to read "Thomas Cunningham", written in a cursive style.

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